UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,339	05/05/2006	Rainer Strohmaier	10191/4596	6590

26646 7590 08/17/2010

KENYON & KENYON LLP
ONE BROADWAY
NEW YORK, NY 10004

EXAMINER	
KAUR, GURPREET	
ART UNIT	PAPER NUMBER
1795	
MAIL DATE	DELIVERY MODE
08/17/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/578,339	STROHMAIER ET AL.	
	Examiner	Art Unit	
	GURPREET KAUR	1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 June 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *21-42* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *21-42* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *5/5/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Status of the Claims

1. Claims 21-42 are pending.

Election/Restrictions

2. In light of applicant arguments regarding restriction requirement, the restriction requirement is withdrawn.

Drawings

3. The informal drawings in Figures 6-8 are not of sufficient quality to permit examination. Accordingly, replacement drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to this Office action. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action.

Applicant is given a TWO MONTH time period to submit new drawings in compliance with 37 CFR 1.81. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a). Failure to timely submit replacement drawing sheets will result in ABANDONMENT of the application.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 34-41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 34, examiner is interpreting the claim limitations pertain to figures 1 and 6. Applicant claims the device (amperometric sensor) further comprises a Nernst cell and a pump cell. It is unclear to examiner which elements in figures 1 and 6 or from specification corresponds to electrodes of amperometric sensor, two electrodes of Nernst cell and two pump electrodes of pump cell to overall claim subject matter of claim 34.

Regarding claims 35 and 36, examiner is interpreting the claim limitations pertain to figure 6. It is unclear to examiner how does the reference channel is disposed between reference electrode and the opening. It is also unclear where does the diffusion path and storage volume are being developed in relation to the reference gas channel. Furthermore, claim 35 which depend on claim 22 claims "the diffusion barrier" as being between the storage volume and reference electrode however claim 22 claims the diffusion barrier is behind the storage volume. Claim 36 which depends on claim 30 and then to claim 22 claims "the diffusion barrier is situated in the reference gas channel," again it is unclear to the examiner, "the diffusion barrier" in claim 22 is claimed to be behind the storage volume."

Regarding claim 40, applicant recites "a diffusion path and an oxygen storage volume are arranged in front of the diffusion path..." Examiner is unclear to both diffusion path and oxygen storage volume being arranged in front a diffusion path.

Examiner is construing rather only the oxygen storage volume is front of the diffusion path.

Regarding claim 37, applicant claims sensing element comprising a Nernst cell, a pump cell and integrate with an amperometric sensor with their respective electrodes. It is unclear to examiner which elements in figures 1-8 or from specification corresponds to two first electrodes of amperometric sensor, two electrodes of Nernst cell and two pump electrodes of pump cell to overall claim subject matter of claim 37.

Claims 38, 39 and 41 are rejected under 35 USC 112 second paragraph based on their dependence on claim 37.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 21-24, 26, 30-36, 40 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stahl et al. (U.S. Pat. No. 6,495,027) in view of Joshi et al. (U.S. Pat. No. 5,021,137).

Regarding claim 21, Stahl et al. teaches an electrochemical sensor (10) which inherently operates on limiting current principle and measure signal proportional to the concentration of oxygen in the gas mixture (see abstract). Stahl further teaches that oxygen is pumped in and out of the measuring gas compartment (see abstract) and the current generated is based on the pressure of the gas that is pumped into the sensor comprising:

two first electrode (31 and 35) mounted on solid electrolyte (11c), electrodes 31 and 35 (see figure 2 and col. 3, ll. 50-53), therefore it is obvious a voltage is applied to the electrodes and electrode 31 is shielded by diffusion barrier, 25 (see figure 2);

a signal is measured (pump current) through the electrodes to determine the quantity and it is obvious pump current is a measure of the gas pressure;

Stahl teaches that in the first pump cell a constant oxygen partial pressure is established (see col. 3, ll. 41-45) which is upstream of the diffusion barrier (see figure 2) but is silent to mole fraction to a constant 100% i.e. pure oxygen gas.

As indicated in applicant specification that a pump cell is used to pump oxygen into the storage volume (see page 10, ll. 8-16).

Moreover, Joshi et al. teaches a solid electrolyte electrochemical cell where in the electrodes across the electrolyte transports > 99% pure oxygen (see col.3, ll. 24-36).

Therefore it would be obvious to person of ordinary skill in the art at the time of the invention that Stahl first pump cell can also perform to pump >99% pure oxygen as taught by Joshi oxygen concentrator which has greater performance of pumping oxygen (see col. 3, ll. 1-3).

Regarding claim 21, the limitation reciting "at least during a pressure measuring phase…" is an intended use of the apparatus and the cited prior art teaches all of the positively recited structure of the claimed apparatus. The Courts have held that a statement of intended use in an apparatus claim fails to distinguish over a prior art apparatus. See *In re Sinex*, 309 F.2d 488, 492, 135 USPQ 302, 305 (CCPA 1962).

6. Regarding claims 22, 23, 24 and 26, Stahl teaches storage volume (measuring gas compartment, 13) for the oxygen, and the measuring gas compartment is arranged in front of the diffusion barrier (25). A diffusion path (gas intake port, 21 which is equivalent to channel) is closes the compartment 13 and two electrodes 28 and 29 are situated at the solid electrolyte (11a) to pump the oxygen through the solid electrolyte (see figure 2 and col. 3, ll. 33-62). The diffusion path contains the diffusion barrier, 23 which is comprised of ceramic porous material which inherently has pressure gradient. It would be obvious to one of ordinary skill in the art to design the pressure gradient smaller or larger depending on the desirability.

7. Regarding claim 30, Stahl teaches that the second electrodes for pumping the oxygen are additional electrodes (electrodes 28 and 29). Electrode, 28 is inside the

compartment, 13 and electrode, 29 is outside and exposed to gas mixture (see figure 2). Stahl further teaches that oxygen can be pumped in or out of the compartment, 13 by applying pump voltage to the electrodes 28 and 29 (see col. 3, ll. 43-62), thus electrode, 28 can either act as anode or cathode.

8. Regarding claim 32, Stahl teaches an electrochemical sensor which measure signal proportional to the concentration of oxygen in the gas mixture of internal combustion engine (see abstract).

9. Regarding claims 31 and 33, Stahl teaches that inner electrodes (28, 31, and 33) can be combined to form a continuous electrode (see col. 4, ll. 14-16), therefore it would obvious to one of ordinary skill in the art to assert from the teaching of Stahl combined inner electrodes as one electrode will function as electrodes of the amperometric sensor to determine the oxygen concentration in exhaust gas of internal combustion engine (see abstracta) and to pump the gas component.

Regarding claim 31, the limitation reciting “electrode voltage is above to have …..as an anode” is an intended use of the apparatus and the cited prior art teaches all of the positively recited structure of the claimed apparatus. The Courts have held that a statement of intended use in an apparatus claim fails to distinguish over a prior art apparatus. See *In re Sinex*, 309 F.2d 488, 492, 135 USPQ 302, 305 (CCPA 1962).

10. Regarding claim 34, for examination purposes, examiner is considering electrodes for Nernst cell and pump cell of claim 34 is same as electrodes needed for claim 21 amperometric sensor.

Regarding claim 34, Stahl teaches a Nernst cell (measurement space, 15) made up of electrolyte (11b) and two electrodes (31 and 35), 31 is inside the measurement space, 15 and 35 is exposed to pump air in a reference channel, 19 (see figure 2);

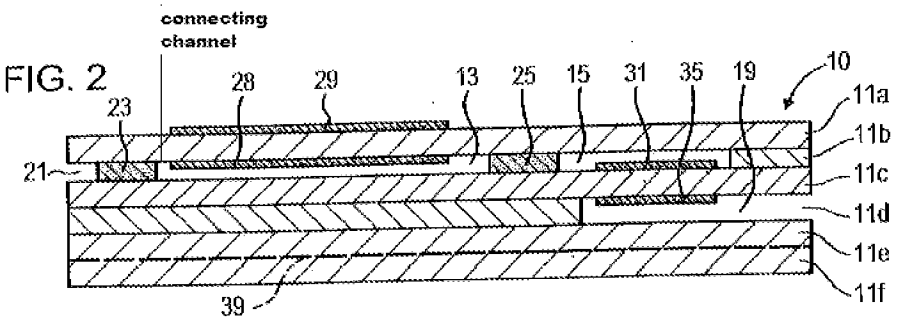
a pump cell (measurement gas space 13) with the pump electrodes (electrodes 28 and 29) for pumping the oxygen. Electrode, 28 is inside the compartment, 13 and electrode, 29 is outside and exposed to gas mixture (see figure 2). Stahl teaches that inner electrodes (28 and 31) can be combined to form a continuous electrode (see col. 4, ll. 14-16), therefore it would obvious to one of ordinary skill in the art to assert from the teaching of Stahl combined inner electrodes as one electrode is present in the measuring chamber

a connecting channel (see annotated figure 2 below) to exhaust port, 21 which opens to measuring chamber (15), the diffusion path (gas intake port, 21 which is equivalent to channel) is part of the storage volume (measuring gas compartment, 13) and diffusion barrier (25) is situated between the measuring chamber (15) and storage volume (see figure 2).

Regarding claim 34, the limitation reciting “pump electrodes are used intermittently... ” is an intended use of the electrodes and the cited prior art teaches all of the positively recited structure of the claimed apparatus. The Courts have held that a

statement of intended use in an apparatus claim fails to distinguish over a prior art apparatus. See *In re Sinex*, 309 F.2d 488, 492, 135 USPQ 302, 305 (CCPA 1962).

FIG. 2



11. Regarding claims 35 and 36, examiner is construing the limitations to best of her understanding. Claims 35 and 36 limitations are rejected as indicated above in claim 34 and moreover Stahl teaches a reference gas channel (19) with an opening exposed to an air.

12. Regarding claim 40, see figure 2 of Stahl and claim 34.

13. Regarding claim 42, Stahl teaches storage volume is measuring gas compartment, 13 and diffusion path (gas intake port, 21 which is equivalent to channel) contains the diffusion barrier (23) (see figure 2).

14. Claims 25 and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stahl and Joshi as applied to claim 21 above, and further in view of Imamura et al. (U.S. Pat. No. 6,338,782) and Chen et al. (U.S. Pat. No. 7,048,844).

Regarding claims 25 and 27-29, Stahl teaches diffusion path is formed by porous ceramic material but Stahl in view of Joshi does not teach storage volume is formed by porous ceramic material and ceramic material is aluminum oxide.

However, Imamura et al. teaches a gas sensor which is comprised of storage volume (chamber 101) and inlet (diffusion path) which are filled with porous material comprised of for offering desired diffusion resistance to the measurement gas (see col. 4, ll. 33-40 and figure 2).

Upon combining teaching of Imamura with Stahl sensor, the measurement space filled with porous ceramic material will border the diffusion barrier (25).

Therefore it would be obvious to person of ordinary skill in the art at the time of the invention to modify the diffusion path and first pump cell of Stahl by having chamber 101 of Imamura which is comprised of both diffusion path and first pump cell because Imamura chamber function in the same manner as Stahl sensor and provides desired diffusion resistance.

Imamura teaches the porous material is comprised of alumina powder and other components (see col. 9, ll. 19-25) but does not teach only being alumina powder. However, Chen et al. teaches a gas sensor wherein the diffusion limiting material, 38 is aluminum oxide powder with average particle size distribution of about 4.5 micrometer to about 5.5 micrometer to provide limiting current of desirability of the sensor (see col. 5, ll. 49-67 over to col. 5, ll. 1-7). Furthermore, Chen teaches that diffusion material controls the diffusion of the oxygen (see col. 5, ll. 49-67); therefore it would be obvious aluminum oxide had desired porosity required by Knudsen diffusion.

Therefore it would be obvious to person of ordinary skill in the art at the time of the invention to incorporate aluminum oxide powder of Chen as diffusion barrier in the Stahl sensor because aluminum oxide powder provides limiting current of desirability of the sensor.

15. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stahl et al. (U.S. Pat. No. 6,495,027) in view of Kato et al. (U.S. Pat. No. 5,948,963) and Joshi et al. (U.S. Pat. No. 5,021,137).

Regarding claim 37, for examination purposes, examiner is considering electrodes for Nernst cell and pump cell of claim 37 is same as electrodes needed for an amperometric sensor.

Regarding claim 37, Stahl teaches a Nernst cell (measurement space, 15) made up of electrolyte (11b) and two electrodes (31 and 35), 31 is inside the measurement space, 15 and 35 is exposed to pump air in a reference channel, 19 (see figure 2);

a pump cell (measurement gas space 13) with the pump electrodes (electrodes 28 and 29) for pumping the oxygen. Electrode, 28 is inside the compartment, 13 and electrode, 29 is outside and exposed to gas mixture (see figure 2). Stahl teaches that inner electrodes (28 and 31) can be combined to form a continuous electrode (see col. 4, ll. 14-16), therefore it would obvious to one of ordinary skill in the art to assert from the teaching of Stahl combined inner electrodes as one electrode is present in the measuring chamber;

Stahl does not teach that inner pump electrode (28) is situated in the measuring space (15).

However, Kato teaches a gas sensor assembly wherein the inner pump electrode (34) can be located in same chamber (28) (see figure 4).

Since at the time of the invention both the teaching of Stahl and Kato were known, thus it would be obvious one of ordinary skill in the art to optimize the Stahl measuring space (15) to accommodate both the inner pump electrode and measuring electrode to measure the concentration of gas in exhaust gas. Furthermore, the combination of familiar elements is likely to be obvious when it does no more than yield predictable results. See *KSR International Co. v. Teleflex Inc.*, 550 U.S. __,__, 82 USPQ2d 1385, 1395 – 97 (2007) (see MPEP § 2143, A.).

Stahl et al. teaches an electrochemical sensor (10) which inherently operates on limiting current principle and measure signal proportional to the concentration of oxygen in the gas mixture (see abstract). Stahl further teaches that oxygen is pumped in and out of the measuring gas compartment (see abstract) and the current generated is based on the pressure of the gas that is pumped into the sensor comprising:

two first electrode (31 and 35) mounted on solid electrolyte (11c), electrodes 31 and 35 (see figure 2 and col. 3, ll. 50-53), therefore it is obvious a voltage is applied to the electrodes and electrode 31 is shielded by diffusion barrier, 25 (see figure 2);

a signal is measured (pump current) through the electrodes to determine the quantity and it is obvious pump current is a measure of the gas pressure;

Stahl teaches that in the first pump cell a constant oxygen partial pressure is established (see col. 3, ll. 41-45) which is upstream of the diffusion barrier (see figure 2) but is silent to mole fraction to a constant 100% i.e. pure oxygen gas.

As indicated in applicant specification that a pump cell is used to pump oxygen into the storage volume (see page 10, ll. 8-16).

Moreover, Joshi et al. teaches a solid electrolyte electrochemical cell where in the electrodes across the electrolyte transports > 99% pure oxygen (see col.3, ll. 24-36).

Therefore it would be obvious to person of ordinary skill in the art at the time of the invention that Stahl first pump cell can also perform to pump >99% pure oxygen as taught by Joshi oxygen concentrator which has greater performance of pumping oxygen (see col. 3, ll. 1-3).

Regarding claim 37, the limitation reciting "at least during a pressure measuring phase…" is an intended use of the apparatus and the cited prior art teaches all of the positively recited structure of the claimed apparatus. The Courts have held that a statement of intended use in an apparatus claim fails to distinguish over a prior art apparatus. See *In re Sinex*, 309 F.2d 488, 492, 135 USPQ 302, 305 (CCPA 1962).

16. Claims 38 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stahl, Kato and Joshi as applied to claim 37 above, and further in view of Wahl et al. (U.S. Pub. No. 2002/0175077).

Regarding claims 38 and 39, Stahl teaches a reference gas channel (19) with an opening and a reference electrode (35) (see Stahl figure 2) but Stahl, Kato and Joshi do

not teach a diffusion path and oxygen storage volume stored towards the reference electrode and a additional electrode separated by diffusion barrier.

However, Wahl et al. teaches a gas sensor assembly wherein the gas channel (253) comprises a reference electrode (232) with a diffusion path (251 comprised of porous material) and oxygen storage volume (supply area, 216) which is arranged in front of the diffusion path. The gas channel also has an additional electrode (233) located in the gas space 251 also contains porous material (see paragraph 0031 and figure 6), thus additional electrode is separated from the reference electrode via diffusion barrier (porous material). Wahl et al. further teaches reference gas space can be in contact with the measuring gas (see paragraph 0035).

Therefore it would be obvious to person of ordinary skill in the art at the time of the invention to modify the reference gas channel of Stahl with the teachings of Wahl et al. by adding additional electrode in the reference gas channel such that appropriate amount of oxygen can be pumped into to the reference gas channel with the use of additional electrode so that oxygen partial pressure in reference gas space is always adequate (see Wahl, paragraphs 0024 and 0032).

Regarding claims 38 and 39 the limitation reciting “the reference electrode is operated in…. …” and “at intervals, such voltage is applied to …” respectively are an intended use of the apparatus and the cited prior art teaches all of the positively recited structure of the claimed apparatus. The Courts have held that a statement of intended use in an apparatus claim fails to distinguish over a prior art apparatus. See *In re Sinex*, 309 F.2d 488, 492, 135 USPQ 302, 305 (CCPA 1962).

17. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stahl, Kato and Joshi as applied to claim 37 above, and further in view of Imamura et al. (U.S. Pat. No. 6,338,782) and Chen et al. (U.S. Pat. No. 7,048,844).

Regarding 41, Stahl teaches diffusion path is formed by porous ceramic material (23) (see figure 2) which inherently has pressure gradient. It would be obvious to one of ordinary skill in the art to design the pressure gradient smaller or larger depending on the desirability but Stahl in view of Kato Joshi does not teach storage volume is formed by porous ceramic material and ceramic material is aluminum oxide.

However, Imamura et al. teaches a gas sensor which is comprised of storage volume (chamber 101) and inlet (diffusion path) which are filled with porous material comprised of for offering desired diffusion resistance to the measurement gas (see col. 4, ll. 33-40 and figure 2).

Upon combining teaching of Imamura with Stahl sensor, the measurement space filled with porous ceramic material will border the diffusion barrier (25).

Therefore it would be obvious to person of ordinary skill in the art at the time of the invention to modify the diffusion path and first pump cell of Stahl by having chamber 101 of Imamura which is comprised of both diffusion path and first pump cell because Imamura chamber function in the same manner as Stahl sensor and provides desired diffusion resistance.

Imamura teaches the porous material is comprised of alumina powder and other components (see col. 9, ll. 19-25) but does not teach only being alumina powder.

However, Chen et al. teaches a gas sensor wherein the diffusion limiting material, 38 is aluminum oxide powder with average particle size distribution of about 4.5 micrometer to about 5.5 micrometer to provide limiting current of desirability of the sensor (see col. 5, ll. 49-67 over to col. 5, ll. 1-7). Furthermore, Chen teaches that diffusion material controls the diffusion of the oxygen (see col. 5, ll. 49-67); therefore it would be obvious aluminum oxide had desired porosity required by Knudsen diffusion.

Therefore it would be obvious to person of ordinary skill in the art at the time of the invention to incorporate aluminum oxide powder of Chen as diffusion barrier in the Stahl sensor because aluminum oxide powder provides limiting current of desirability of the sensor.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GURPREET KAUR whose telephone number is (571)270-7895. The examiner can normally be reached on Monday-Friday (Alternate Friday Off), 8:00-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571)272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nam X Nguyen/
Supervisory Patent Examiner, Art Unit 1753

/G. K./
Examiner, Art Unit 1795
8/12/2010